

```

graph TD
    32["[32] Determine requirements"] --> 33["[33] Define the diagnostic and prognostic functions"]
    33 --> 34["[34] Select the characteristics to be sensed and monitored"]
    34 --> 35["[35] Define the appropriate architecture"]
    35 --> 36["[36] Select a set of discrete sensors and sensitized medium"]
    36 --> 37["[37] Construct the monitoring devices"]
    37 --> 38["[38] Develop models"]
    38 --> 39["[39] Develop the monitoring applications"]
    39 --> 40["[40] Install the apparatus"]
    40 --> 41["[41] Perform first test sequence"]
    41 --> 42["[42] Monitoring"]
    42 --> 43["[43] Diagnose health states"]
    43 --> 44["[44] Prognosis"]
    44 --> 45["[45] Communicating data and knowledge"]
    45 --> 46["[46] Machine learning"]
    46 --> 47["[47] Improving models"]
    47 --> 42
    38 --> 33

```

Fig. 7.

Figure. 8

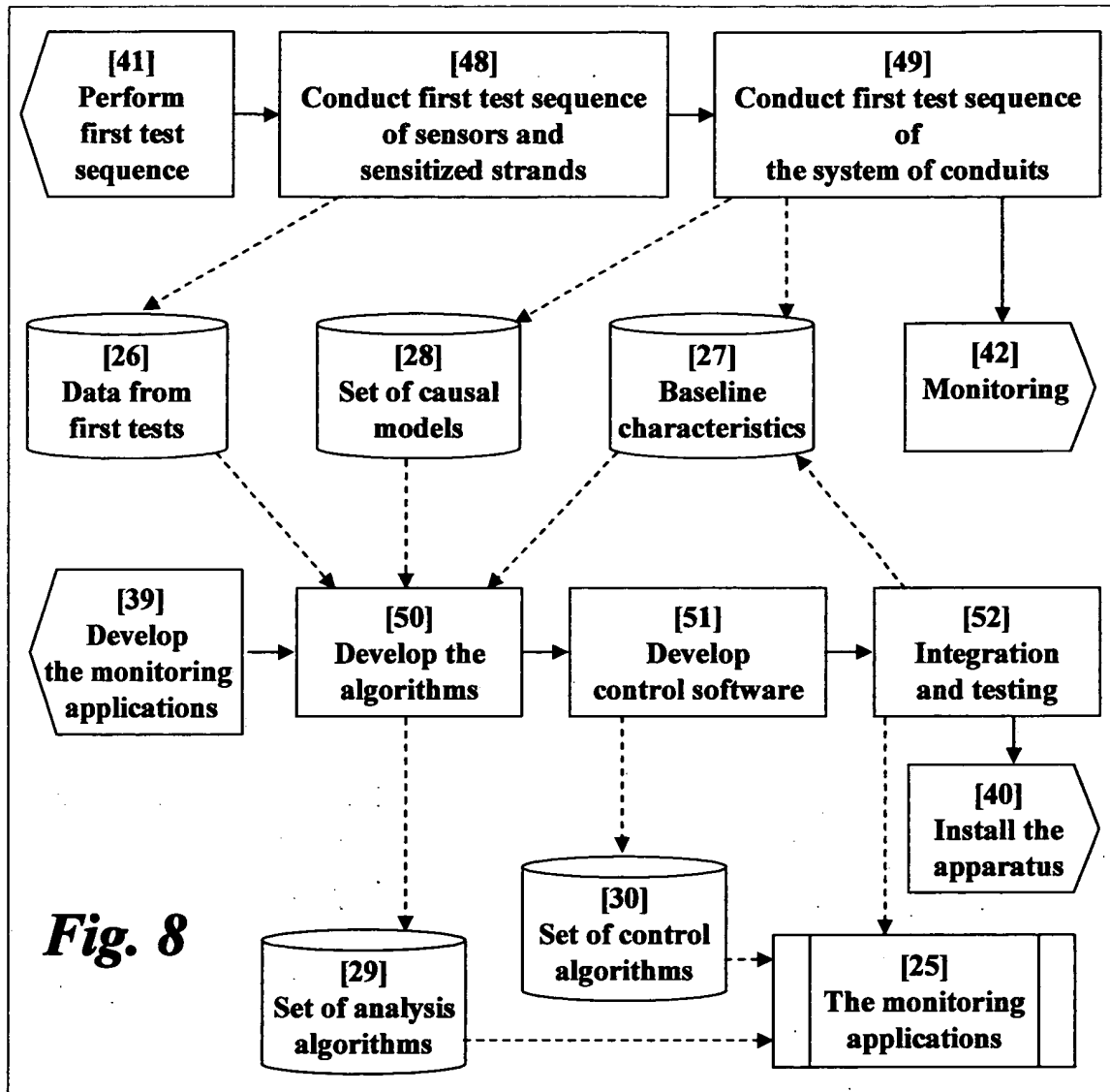


Figure 9

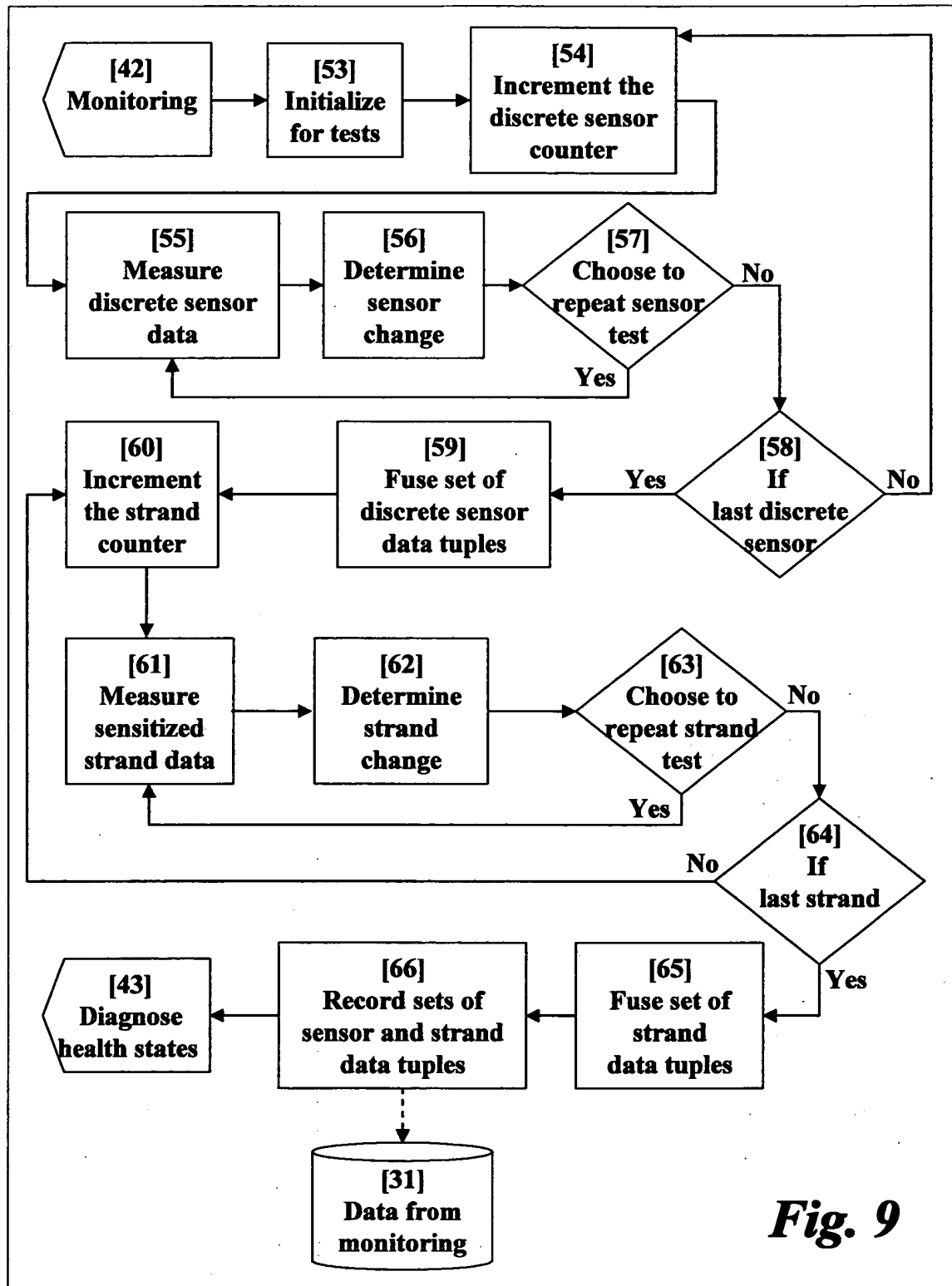
**Fig. 9**

Figure 10

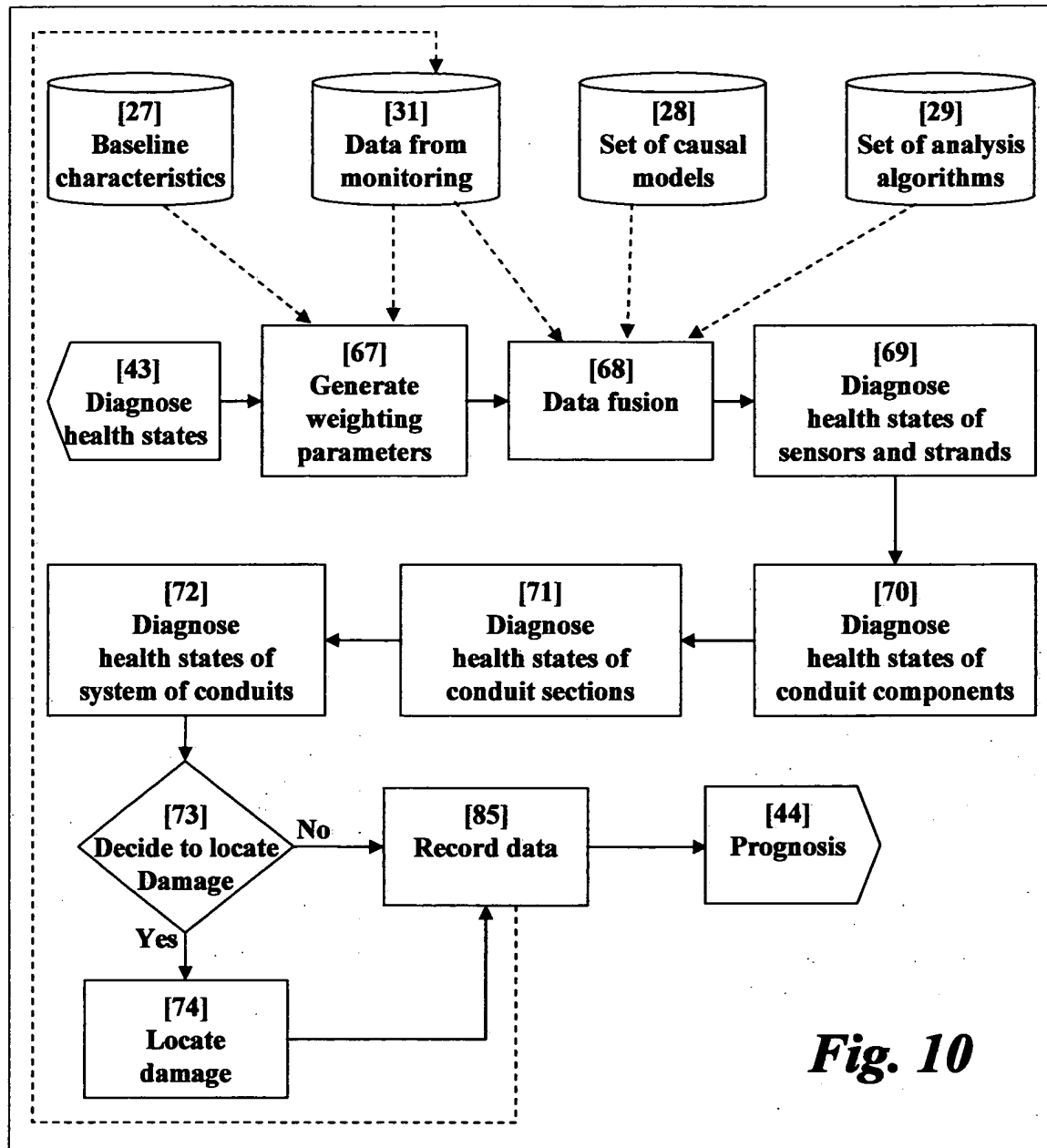
**Fig. 10**

Figure 11

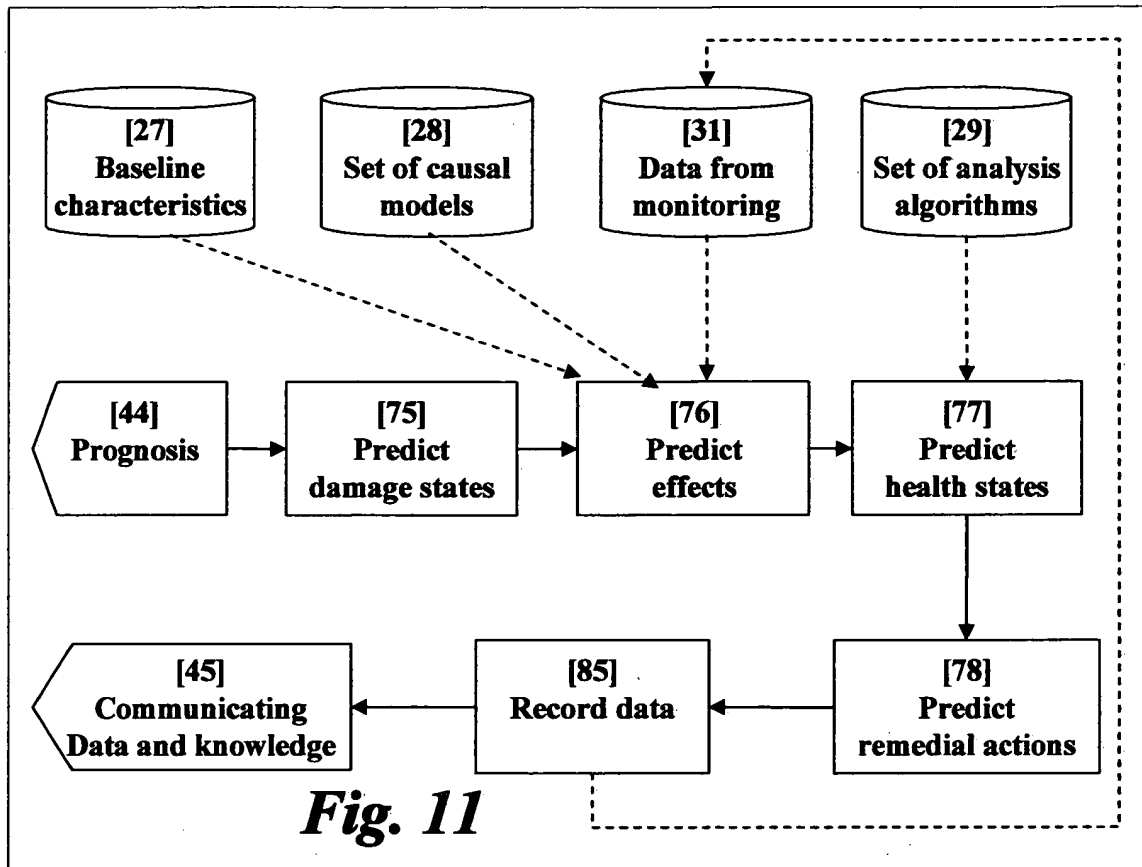


Figure 13

